## **Description of Additional Supplementary Files**

File Name: Supplementary Data 1

Description: Insulinoma Tumor Sample Whole Exome Sequencing Depth.

File Name: Supplementary Data 2

Description: Protein-Altering SNVs of the Insulinomas.

File Name: Supplementary Data 3

Description: Protein-Altering non-SNVs of the Insulinomas.

File Name: Supplementary Data 4

Description: Pathway Enrichment Analysis of Predicted Insulinoma Key Driver Variants,

Based on GO Terms

File Name: Supplementary Data 5

Description: Significant Amplification Peaks by GISTIC2.0 Analysis and Genes Contained

within Each Peak

File Name: Supplementary Data 6

Description: Significant Deletion Peaks by GISTIC2.0 Analysis and Genes Contained within

Each Peak

File Name: Supplementary Data 7

Description: RNA-seq Sample Sequencing Information

File Name: Supplementary Data 8

Description: Differential Expression Analysis of 13821 genes Expressed in Both Insulinomas

and Beta cells, with Beta Cells as the Control.

File Name: Supplementary Data 9

Description: Differential Splicing Analysis (T Test), Insulinoma vs. Beta Cells at FDR 10%

File Name: Supplementary Data 10

Description: Top 100 Genes with Most Significant Differentially Spliced Exons Based on F and

Simes Tests

File Name: Supplementary Data 11

Description: Insulinoma Co-Expression Network Table

File Name: Supplementary Data 12

Description: Projection of Protein-Coding DEGs in Isulinomas vs Beta Cells onto the

Insulinoma Co-Expression Network.

File Name: Supplementary Data 13

Description: Top 20 GO and KEGG Enriched Terms (based on FDR) for Each Insulinoma

WGCNA Module

File Name: Supplementary Data 14

Description: One-Sided Fisher Exact Test for Enrichment of Up-Regulated DEGs in

Insulinomas Compared to Beta Cells in Histone Mark Signatures

File Name: Supplementary Data 15

Description: Insulinoma Co-Expression Network Modules Enriched with Histone Marks

File Name: Supplementary Data 16

Description: Allele-Specific Expression (in Both Insulinomas and Beta cells) Result.

File Name: Supplementary Data 17

Description: Differential Expression Analysis of Genes Expressed between rs689 T vs A allele-

expressing Insulinomas, with rs689 A allele as the Control

File Name: Supplementary Data 18

Description: Genes with Bisque4 MMP ≤ 0.01